Reissue application	Japan 06-103133, April 15, 1994
	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
13. The method of claim 11, wherein	The reference proposes a "threshold
the step of selecting includes the	value" of 50 [Action] which
step of selecting Y_AY_B such that Y_B is	corresponds to $Y_A = 5$ and $Y_B = 0$.
0 (zero).	
14. The method of claim 11, including	The key file 3 has the restored date
an additional step, after the step of	keys and it is part of the database
sorting, of storing the sorted dates	[0016] to correspond to this clause.
and their associated information back	_
into the database.	
15. The method of claim 14, including	The act of manipulating information is
the additional step, after the step of	the purpose of any database - it is
sorting, of manipulating information	inherent in the reference.
in the database having the reformatted	
date therein.	

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Reissue Application, claim 16 Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation] 16. A method of processing The reference is directed at managing date keys of a data file, [Title] which symbolic representations of dates is effected by processing date data in stored in a database, comprising a database. Each item of date data is the steps of: a symbolic representation providing a database with symbolic The unprocessed database uses two digits to represent each of year, representations of dates stored month and day data, see the data in therein according to a format date file 1, an example is the first wherein M_1M_2 is the numerical month entry, "991203" which represents 3rd designator D_1D_2 is the numerical Dec. 1999 [0003]. The text [0010 and day designator, and Y_1Y_2 is the 0011] make it clear that the date numerical year designator, all of range is limited "The reason for this the symbolic representations of is that the data file 1 does not dates falling within a 10-decade contain the year data '2099' or period of time; '1900'.", there is a "minimum value of the year data in the 20th century" and a "maximum value of the year data in the 21st century" with the "threshold value" in between these two. This is only possible if the span of the data base is less than 10 decades selecting a window with a Y_AY_B The "threshold value" or α corresponds value for a pivot date of the to $Y_A Y_B$ and it is "no later" than the window, YAYB being no later than earliest Y_1Y_2 since it is selected as the earliest year designator in between n_0n_1 , the minimum value of the 20^{th} Century and the lower value, n_2n_3 , the database; which is the maximum value of the 21st Century [0011]. Although not mentioned in this reference (nor in the specification of the application) those skilled in the art have applied the term "pivot date" to what the claim terms Y_AY_B and the reference refers to as the "threshold value" or determining a century designator A comparison is made between the date C_1C_2 for each symbolic data, nn, and the threshold value, α ; representation of a date in the if nn $> \alpha$, the century designator "19" database₁ C₁C₂ having a first value is used, otherwise, that is if $nn \leq \alpha$, if Y_1Y_2 is less than Y_AY_B and having the other century designator, "20" is a second value if Y_1Y_2 is equal to used [0015]. Note also that the processing is applied to "the or greater than Y_AY_B and; successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] reformatting the symbolic The date data has the selected century designator appended. "In this way, it representation of each symbolic restores the 4-digit year data, and, representation of a date in the combining this with the remaining database, without the addition of

database, without the addition of any new data field to the database with the reformatted symbolic representation of each date in the database having the values C_1C_2 , Y_1Y_2 , M_1M_2 and D_1D_2 , in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

month and day data, transfers it to the key file compilation unit 5". [0015] That is, we start with $Y_1Y_2M_1M_2D_1D_2$ and append C_1C_2 , to end up with $C_1C_2Y_1Y_2M_1M_2D_1D_2$. The processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] Since this may be accomplished "without having to modify" the "existing files" [0018] it is clear that there has not been the addition of a "new data field". Having created the key file 3 allows correct sorting. This is facilitating collectively further processing.

Reissue Application	Japan 06-103133, April 15, 1994
•	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
17. The method of claim 16,	The reference is directed to Y2K,
wherein the window includes at	i.e., the transition from the 20 th to
least a portion of the decade	the 21st century and so, by
beginning in the year 2000.	definition, uses a window which
beginning in the year 2000.	encompasses the year 2000 [Object].
18. The method of claim 17,	Since the reference is directed at Y2K
wherein the step of determining	[Object] the century indicators are
-	"19" and "20" [Constitution].
includes the step of determining	15 and 20 [Constitution].
the first value as 20 and the	
second value as 19.	
19. The method of claim 16,	After 4 digit year value is
including an additional step;	determined, "data sorting" is
after the step of reformatting of	performed [Constitution].
_	
sorting the symbolic	
representations of dates.	
20. The method of claim 16,	Once the proper century indicator is
wherein the step of reformatting	determined, it is "appended" to the
includes the step of reformatting	year data so as to combine the 4 digit
each symbolic representation of a	year with month and day data [0015],
date into the format $C_1C_2Y_1Y_2M_1M_2D_1D_2$	this is the claimed format. The format
separately from the symbolic	is created in the key file 3 which is
_ _	"separate" from the database 1.
representations in the database.	
	The recitation of "reformatting
	separately" cannot serve to
	distinguish the reference since there
	distinguish the reference since there is no support in the specification for
	distinguish the reference since there is no support in the specification for this feature.
21. The method of claim 20	is no support in the specification for this feature.
21. The method of claim 20	is no support in the specification for this feature. Once the eight digit date data (four
including an additional step,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day)
including an additional step, after the step of reformatting, of	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled
including an additional step, after the step of reformatting, of sorting the symbolic	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit
including an additional step, after the step of reformatting, of sorting the symbolic	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort.	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012].
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold"
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting YAYB	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold"
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero).	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$.
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero). 24. The method of claim 16,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$.
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero).	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero). 24. The method of claim 16,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$.
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y _A Y _B such that Y _B is 0 (zero). 24. The method of claim 16, including an additional step,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting YAYB such that YB is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting YAYB such that YB is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic representation of dates and their	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting YaYB such that YB is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic representation of dates and their associated information back into	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic representation of dates and their associated information back into the database.	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this clause.
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting YAYB such that YB is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic representation of dates and their associated information back into the database. 25. The method of claim 24,	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this clause.
including an additional step, after the step of reformatting, of sorting the symbolic representations of dates using a numerical—order sort. 23. The method of claim 16, wherein the step of selecting includes the step of selecting Y_AY_B such that Y_B is 0 (zero). 24. The method of claim 16, including an additional step, after the step of reformatting, of storing the symbolic representation of dates and their associated information back into the database.	is no support in the specification for this feature. Once the eight digit date data (four digit year, two digit month and day) is created, the key file 3 is compiled by "sorting" [0016]. A numerical sort can be used since, the eight digit date data "now accurately reflect the time sequence" [0012]. The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$. The key file 3 has the restored date keys and it becomes part of the database [0016] to correspond to this clause.

after the step of reformatting, of inherent in the reference.

manipulating information in the database having the reformatted date information therein.

Reissue application, claim 26	
	Japan 06-103133, April 15, 1994
	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
A method of processing dates in a	The reference is directed at managir
database, comprising the steps of:	date keys of a data file, [Title] whi
	is effected by processing date data
	a database
providing a database with dates stored	The unprocessed database uses two
therein according to a format wherein	digits to represent each of year,
M_1M_2 is the numerical month designator,	month and day data, see the data in
D_1D_2 is the numerical day designator,	date file 1, an example is the first
and Y_1Y_2 is the numerical year	entry, "991203" which represents 3 rd
designator, all of the symbolic	Dec. 1999 [0003]. The text [0010 and
representations of dates falling	0011] make it clear that the date
within a 10-decade period of time;	
within a 10 decade period of time,	range is limited "The reason for the
	is that the data file 1 does not
	contain the year data '2099' or
	'1900'.", there is a "minimum value
	the year data in the 20 th century" ar
	a "maximum value of the year data in
	the 21st century" with the "threshold
	value" in between these two. This i
	only possible if the span of the dat
	base is less than 10 decades
selecting a window with a YAYB value	The "threshold value" or $lpha$ correspon
for a pivot date of the window, Y_AY_B	to Y_AY_B and it is "no later" than the
being no later than the earliest Y_1Y_2	earliest Y1Y2 since it is selected as
year designator in the database;	between n_0n_1 , the minimum value of the
)	20th Century date range and the lower
)	value, n ₂ n ₃ , which is the maximum
	value of the 21st Century date range
1	
ì	
	[0011]. Although not mentioned in th
	[0011]. Although not mentioned in the reference (nor in the specification
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the application of the specification of the application of the application of the skilled in the application of the specification of the skilled in the specification of the skilled in
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dates."
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α .
	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year
for each date in the database, C_1C_2	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the yeadata, nn, and the threshold value, α if nn > α , the century designator "1
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot date to what the claim terms Y_AY_B and the reference refers to as the "threshold value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" i used [0015]. Note also that the
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and the processive records of data file 1 an
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" in used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B reformatting the symbolic	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data has the selected centure.
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B reformatting the symbolic representation of each symbolic	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot date to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the year data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data has the selected centure designator appended. "In this way,
having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B reformatting the symbolic representation of each symbolic representation of a date in the	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the yead data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data has the selected centured designator appended. "In this way, restores the 4-digit year data, and,
for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B reformatting the symbolic representation of each symbolic	[0011]. Although not mentioned in the reference (nor in the specification the application) those skilled in the art have applied the term "pivot dat to what the claim terms Y_AY_B and the reference refers to as the "threshol value" or α . A comparison is made between the yead data, nn, and the threshold value, α if nn > α , the century designator "1 is used, otherwise, that is if nn \leq the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data has the selected centure designator appended. "In this way,

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the reformatted symbolic the key file compilation unit 5". [0015] That is, we start with representation of each date in the database having the values C_1C_2 , Y_1Y_2 , $Y_1Y_2M_1M_2D_1D_2$ and append C_1C_2 , to end up M_1M_2 and D_1D_2 , in order to facilitate with $C_1C_2Y_1Y_2M_1M_2D_1D_2$. The processing collectively further processing, the is applied to "the successive records reformatted symbolic representations of data file 1 and terminates when the of each of the symbolic last record is processed", i.e., the representations of each of the dates; processing is applied to "each" record. [0015] Since this may be and accomplished "without having to modify" the "existing files" [0018] it is clear that there has not been the addition of a "new data field". Further augmenting the year field from YY to CCYY does not amount to addition of a new data field. sorting the dates in the form The key file compilation unit 5 $C_1C_2Y_1Y_2M_1M_2D_1D_2$. arranges the data in ascending order "by performing sorting processing ...". [0016]

Reissue Application	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
28. The method of claim 26, wherein the step of	The reference proposes a "threshold value" of 50 [Action] which corresponds to $Y_A = 5$ and $Y_B = 0$.
selecting includes the step of:	
selecting Y_AY_B such that Y_B is 0 (zero).	
29. The method of claim 26, including an additional step after the step of sorting, of;	The key file 3 has the restored date keys and it is part of the database [0016] to correspond to this clause.
storing the sorted dates and their associated information back into the database.	
30. The method of claim 29, including the additional step, after the step of sorting, of:	The act of manipulating information is the purpose of any database - it is inherent in the reference.
manipulating information in the database having the reformatted dates therein.	

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Reissue application, claim 31	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
A method of processing symbolic representations of dates stored in a database, comprising the steps at:	The reference is directed at managing date keys of a data file, [Title] which is effected by processing date data in a database. Each data item is a symbolic representation.
providing a database with symbolic representations of dates stored therein according to a format wherein Y_1Y_2 is the numerical year designator:	The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003
selecting a window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;	The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century date range and the lower value, n_2n_3 , which is the maximum value of the 21^{st} Century date range[0011].
determining a century designator C_1C_2 for each symbolic representation of a date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ;	A comparison is made between the year data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the	The date data has the selected century designator appended. "In this way, it restores the 4-digit year data, and, combining this with the remaining month and day data, transfers it to the key file compilation unit 5". [0015] That is, we start with
database having the values C_1C_2 , Y_1Y_2 , in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.	$Y_1Y_2M_1M_2D_1D_2$ and append C_1C_2 , to end up with $C_1C_2Y_1Y_2M_1M_2D_1D_2$. Clearly this means each item has the values C_1C_2 and Y_1Y_2 . The processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] Since this may be accomplished "without having to modify" the "existing files" [0018] it is clear that there has not been the addition of a "new data field". Further the augmenting of YY with CC does not require a new data field.

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Reissue Application, claim 32	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
A method of processing dates in a database, comprising the steps of:	The reference is directed at managing date keys of a data file, [Title] which is effected by processing date data in a database
providing a database with symbolic representations of dates stored therein according to a format wherein Y_1Y_2 is the numerical year designator	The unprocessed database uses two digits to represent each of year, month and day data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003].
selecting a window with a Y_1Y_2 , value for the pivot year of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;	The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century date range and the lower value, n_2n_3 , which is the maximum value of the 21^{st} Century date range [0011]. Although not mentioned in this reference (nor in the specification of the application) those skilled in the art have applied the term "pivot date" to what the claim terms Y_AY_B and the reference refers to as the "threshold value" or α .
determining a century designator C_1C_2 for each symbolic representation of a date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ;	A comparison is made between the year data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
reformatting the symbolic representation of each of the dates in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values C ₁ C ₂ , Y ₁ Y ₂ , in order to facilitate collectively further processing the reformatted symbolic representations of each of the dates; and	The date data has the selected century designator appended. "In this way, it restores the 4-digit year data, and, combining this with the remaining month and day data, transfers it to the key file compilation unit 5". [0015] That is, we start with Y ₁ Y ₂ M ₁ M ₂ D ₁ D ₂ and append C ₁ C ₂ , to end up with C ₁ C ₂ Y ₁ Y ₂ M ₁ M ₂ D ₁ D ₂ . The processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] Since this may be accomplished "without having to

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	modify" the "existing files" [0018] it is clear that there has not been the addition of a "new data field". Further the augmenting of YY with CC does not require the addition of a new field.
sorting the dates in the form $C_1C_2Y_1Y_2$.	The key file compilation unit 5 arranges the data in ascending order "by performing sorting processing". [0016] There is no description in the Dickens specification of sorting on $C_1C_2Y_1Y_2$ as claimed here. Thus to this extent this claim lacks written description support. Dickens has argued that disclosure of sorting on $C_1C_2Y_1Y_2M_1M_2D_1D_2$ supports claiming sorting on $C_1C_2Y_1Y_2M_1M_2D_1D_2$ supports claiming sorting on $C_1C_2Y_1Y_2$, see p. 58 of the response. If that is the case then the reference's teaching of sorting on $C_1C_2Y_1Y_2M_1M_2D_1D_2$ is an anticipation of the claim.

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Reissue Application, claim 33	Japan 06-103133, April 15, 1994
	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
A method of processing symbolic	The reference is directed at managing
representations of dates stored in a	date keys of a data file, [Title] which
database, comprising the steps of:	is effected by processing date
	representations in a database, each
	item of data is a symbolic
	representation
providing a database with symbolic	The unprocessed database uses two
representations of dates stored	digits to represent year data, see the
therein according to a format wherein	data in date file 1, an example is the
Y_1Y_2 is the year designator,	first entry, "991203" which represents
	3 rd Dec. 1999 [0003].
selecting a window with a YAYB value	The "threshold value" or a corresponds
for the first decade of the window,	to Y _A Y _B and it is "no later" than the
Y _A Y _B being no later than the earliest	earliest Y ₁ Y ₂ since it is selected as
Y ₁ Y ₂ year designator in the database;	between n_0n_1 , the minimum value of the
	20 th Century date range and the lower
	value, n ₂ n ₃ , which is the maximum
	value of the 21st Century date range
	[0011].
determining a century designator C ₁ C ₂	A comparison is made between the date
for each symbolic representation of a	data, nn, and the threshold value, α ;
date in the database, C_1C_2 having a	if nn > α , the century designator "19"
first value if Y_1Y_2 is less than Y_AY_B	
and having a second value if Y1Y2 is	is used, otherwise, that is if $nn \le \alpha$,
equal to or greater than Y_AY_B ; and	the other century designator, "20" is
	used [0015]. Note also that the
	processing is applied to "the
	successive records of data file 1 and
	terminates when the last record is
	processed", i.e., the processing is
roformatting the symbolic	applied to "each" record. [0015]
reformatting the symbolic	The date data, augmented with the
representation of each symbolic	century designator (19 or 20), is then
representation of a date in the	written to key file 3; as seen there
database, without changing any of the	the date data has been reformatted to
symbolic representations of a date in	add the century designator. The reformatted data has the form of
the database during the reformatting	
step, with the reformatted symbolic	C ₁ C ₂ Y ₁ Y ₂ M ₁ M ₂ D ₁ D ₂ . Since the reference
representation of each date in the	does not mention rewriting the database 1, this operation can be
database having the values C_1C_2 , Y_1Y_2 ,	-
in order to facilitate collectively	said to perform reformatting without changing the representations in the
further processing the reformatted symbolic representations of each of	1
the dates.	database, meaning database 1.
the dates.	The written description support for
	the clause "without changing any of
	the symbolic representations of a data
	in the database during the
	reformatting step" is lacking since,
	neither the clause nor anything like
	it is found either in the Dickens
	specification or file history
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Reissue Application, claim 34 Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation The reference is directed at managing A method for representing and utilizing dates stored in at least one date keys of a data file, [Title] which date field of a database utilizing is effected by processing date symbolic representations of the dates representations in a database. Each stored in the at least one date field item of data is a symbolic of the database, which are in a format representation. The problem solved by that creates ambiguity between dates the invention is the inversion in time in each of a pair of adjacent sequence caused by the use of two digit year indications at the year centuries, comprising the steps of: 2000 [0005]. The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The symbolic representations are converting each of the symbolic amended by adding either "19" or "20" representations of dates stored in the to represent the 20th and 21st century, at least one date field of the respectively [0015]. Note also that database to a symbolic representation of each of the respective dates that the processing is applied to "the does not create the ambiguity, successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] by windowing the symbolic Assuming the term "windowing" and "pivot year" are given the common representations of each of the definition, then the "threshold value" respective dates as stored in the at least one date field of the database of the reference corresponds to the beginning of the "window" as well as against a pivot year represented by one of the symbolic representations of the "pivot year". The assumption is necessary since the terms "windowing" the dates as stored in the at least and "pivot year" are not found in the one date field of the database, without the addition of any new data Dickens specification. The processing proceeds by selecting a "threshold field to the database for purposes of value" or α which is "no later" than such windowing and converting; and, the earliest year in the database. The threshold value is selected as between n_0n_1 , the smallest 20^{th} Century year and the lower value, n₂n₃, which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \leq) which means that the "threshold value" may be a date stored in the database. Since this processing may be accomplished

"without having to modify" the

"existing files" [0018] it is clear that there has not been the addition of a "new data field".

The reference does not describe that the "threshold" or "pivot year" is a data point in the database, i.e., "a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database". The Dickens specification also fails to describe this feature. If the feature is not ignored then the claim has no description support. If the feature is ignored then it cannot be used to distinguish the reference.

running a program collectively on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database.

Sorting is effected as described in [0006]. Typically sorting is effected by "running a program" and is thus inherent in the reference. meaning to be attributed to the phrase "running a program to sort ... separately from the date data symbolic representations contained in the at least one date field of the database" is difficult to determine since there is no such phrase or anything like it in the Dickens specification or file history. Clearly however, this does not represent a distinction between this clause of the claim and the reference.

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Reissue Application	Japan 06-103133, April 15, 1994
	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
35 A method of claim 34 further	There is no written description of the
comprising the step of:	claimed subject matter. Alternatively
	Dickens argues that opening a database
opening the database prior to the step	is inherent in his disclosure. For
of converting.	the same reason it is inherent in the
	reference.
36. The method of claim 34 further	The reference teaches both sorting a
comprising the step of:	database as well as "otherwise
collectively sorting the converted	manipulating" the data. Assuming the
symbolic representations prior to the	program is effected to sort or
step of running the program on the	manipulate, there is nothing else in
converted symbolic representations.	this claim. There is no support in
	the specification for any other
27 Mb	meaning.
37. The method of claim 35 further	The reference teaches both sorting a
comprising the step of:	database as well as "otherwise
collectively sorting the converted	manipulating" the data. Assuming the
symbolic representations prior to the	program is effected to sort or
step of running the program on the	manipulate, there is nothing else in
converted symbolic representations.	this claim. There is no support in
	the specification for any other
	meaning.
38. The method of claim 34 further	The reference teaches both sorting a
comprising the step of:	database as well as "otherwise
collectively manipulating the	manipulating" the data. Assuming the
converted symbolic representations	program is effected to sort or
prior to the step of running the	manipulate, there is nothing else in
program on the converted symbolic	this claim. There is no support in
representations.	the specification for any other
	meaning.
39. The method of claim 35 further	The reference teaches both sorting a
comprising the step of:	database as well as "otherwise
collectively manipulating the	manipulating" the data. Assuming the
converted symbolic representations	program is effected to sort or
prior to the step of running the	manipulate, there is nothing else in
program on the converted symbolic	this claim. There is no support in
representations.	the specification for any other
	meaning.
40. The method of claim 34 further	The reference teaches both sorting a
comprising the step of:	database as well as "otherwise
collectively sorting the converted	manipulating" the data. Assuming the
symbolic representations according to	program is effected to sort or
a different data field contained in	
the database from the at least one	manipulate, there is nothing else in
TOUR MATABASE TRUM THE AT THAST ONE	
	this claim. There is no support in
date field, prior to the step of	the specification for any other
date field, prior to the step of running the program on the converted	the specification for any other meaning nor is there any support for
date field, prior to the step of	the specification for any other meaning nor is there any support for sorting "according to a different data
date field, prior to the step of running the program on the converted symbolic representations.	the specification for any other meaning nor is there any support for sorting "according to a different data field".
date field, prior to the step of running the program on the converted symbolic representations. 41. The method of claim 35 further	the specification for any other meaning nor is there any support for sorting "according to a different data field". The reference teaches both sorting a
date field, prior to the step of running the program on the converted symbolic representations.	the specification for any other meaning nor is there any support for sorting "according to a different data field".

symbolic representations according to program is effected to sort or a different data field contained in manipulate, there is nothing else in this claim. There is no support in the database from the at least one date field, prior to the step of the specification for any other running the program on the converted meaning nor is there any support for symbolic representations. sorting "according to a different data field". The reference teaches both sorting a 42. The method of claim 34 further database as well as "otherwise comprising the step of: manipulating" the data. Assuming the collectively manipulating the program is effected to sort or converted symbolic representations manipulate, there is nothing else in according to a different data field this claim. There is no support in contained in the database from the at the specification for any other least one date field, prior to the meaning nor is there any support for step of running the program on the sorting "according to a different data converted symbolic representations. field". The reference teaches both sorting a 43. The method of claim 35 further comprising the step of: database as well as "otherwise collectively manipulating the manipulating" the data. Assuming the converted symbolic representations program is effected to sort or according to a different data entry manipulate, there is nothing else in field contained in the database from this claim. There is no support in the at least one date field, prior to the specification for any other the step of running the program on the meaning nor is there any support for converted symbolic representations. sorting "according to a different data entry field". 44. The method of claim 34 wherein the This claim merely calls for data program performs an operation which manipulation of a database which is manipulates the data in a data field inherent in the reference. associated with the at least one date field of the database according to the converted symbolic representation of the date. 45. The method of claim 35 wherein the This claim merely calls for data manipulation of a database which is program performs an operation which manipulates the data in a data field inherent in the reference associated with the at least one date field of the database according to the converted symbolic representation of the date. 46. The method of claim 34 wherein the The reference calls for repetitively operating the conversion apparatus step of converting includes converting at least a. substantial portion of until all dates are converted. each of the plurality of symbolic representations of dates in the at least one date field and repeating this step until each of the date data entries in the at least one date field is converted into the format that does not have the ambiguity. 47. The method of claim 35 wherein the The reference calls for repetitively step of converting includes converting operating the conversion apparatus at least a substantial portion of each until all dates are converted of the plurality of symbolic representations of dates in the at

least one date field and repeating this step until each of the date data	
entries in the at least one date field	
is converted into the format that does	
not have the ambiguity.	
48. The method of claim 46 further	The reference teaches both sorting a
comprising the steps of:	database as well as "otherwise
collectively sorting the converted	manipulating" the data. Assuming the program is effected to sort or
symbolic representations prior to the	manipulate, there is nothing else in
step of running the program on the	this claim. There is no support in
converted symbolic representations.	the specification for any other
	meaning.
49. The method of claim 47 further	The reference teaches both sorting a
comprising the steps of:	database as well as "otherwise manipulating" the data. Assuming the
collectively sorting the converted	program is effected to sort or
symbolic representations prior to the	manipulate, there is nothing else in
step of running the program on the	this claim. There is no support in
converted symbolic representations.	the specification for any other
50 mb	meaning.
50. The method of claim 46 further comprising the step of:	The reference teaches both sorting a database as well as "otherwise
Comprising the step or.	manipulating" the data. Assuming the
collectively manipulating the	program is effected to sort or
converted symbolic representations.	manipulate, there is nothing else in
	this claim. There is no support in
	the specification for any other
E1 The method of oloim 40 funthon	meaning.
51. The method of claim 49 further comprising the step of;	The reference teaches both sorting a database as well as "otherwise"
Compliant one ocep of	manipulating" the data. Assuming the
collectively manipulating the	program is effected to sort or
converted symbolic representations.	manipulate, there is nothing else in
	this claim. There is no support in
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	the specification for any other
52. The method of claim 46 further	meaning.
52. The method of claim 46 further comprising the step of:	
	meaning. The reference teaches sorting a
comprising the step of: collectively sorting the converted	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There
comprising the step of: collectively sorting the converted symbolic representations according to	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field,	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different"
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program.	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of:	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of: collectively sorting the converted	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of:	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of: collectively sorting the converted symbolic representations according to	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database	meaning. The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any
comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program. 53. The method of claim 47 further comprising the step of: collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field,	The reference teaches sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different data field". The reference teaches both sorting a database. Assuming the program is effected to sort or manipulate, there is nothing else in this claim. There is no support in the specification for any other meaning nor is there any support for sorting on "a different

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comprising the step of: database it inherently teaches collectively manipulating the manipulating the data as well as collectively manipulating the data. converted symbolic. 55. The method of claim 53 further Since the reference deals with a database it inherently teaches comprising the step of: collectively manipulating the manipulating the data as well as collectively manipulating the data converted symbolic representations 56. The method of claim 52 wherein the Since the reference deals with a program performs an operation which database it inherently teaches manipulating the data as well as manipulates the data in a data field collectively manipulating the data associated with the at least one date field of the database according to the converted symbolic representation of the date. 57. The method of claim 53 wherein the Since the reference deals with a program performs an operation which database it inherently teaches manipulating the data as well as manipulates the data in a data field associated with the at least one date collectively manipulating the data field of the database according to the converted symbolic representation of the date. 58. The method of claim 54 wherein the Since the reference deals with a database it inherently teaches program performs an operation which manipulates the data in a data field manipulating the data as well as associated with the at least one date collectively manipulating the data field of the database according to the. converted symbolic representation of the date. Since the reference deals with a 59. The method of claim 55 wherein the program performs an operation which database it inherently teaches manipulating the data as well as manipulates the data in a data field collectively manipulating the data associated with the at least one date field of the database according to the converted symbolic representation of the date.

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Reissue application, claim 60

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of. the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the The threshold value is database. selected as between n_0n_1 , the smallest 20th Century year and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \leq) which means

running a program on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the date data symbolic representations of dates contained in the at least one date field of the database.

that the "threshold value" may be a date stored in the database. The meaning to be attributed to the phrase "converting ... without modifying ..." is not apparent since there is no such phrase (or anything like it) to be found in either the Dickens specification or the file history. Clearly, however, this phrase does not distinguish from the reference.

Sorting is effected as described in Typically sorting is effected [0006]. by "running a program" and is thus inherent in the reference. Since the phrase "running a program to sort ... separately from the date data symbolic representations contained in the at least one date field of the database" is not found either in the Dickens specification or file history the meaning to be attributed to this clause is in doubt. It is clear, however that there is no

distinction between this clause of the claim and the reference.

Reissue application, claim 61

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent

centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations at each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least date field of the database for purposes of such windowing and converting;

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the database. The threshold value is selected as between n_0n_1 , the smallest 20th Century year and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. A comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the

Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \le) which means that the

"threshold value" may be a date stored in the database. The meaning to be attributed to the phrase "converting ... without modifying ..." is not apparent since there is no such phrase (or anything like it) to be found in either the Dickens specification or the file history. Clearly, however, this phrase does not distinguish from the reference.

running a program collectively on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate the dates represented by the converted symbolic representations separately from the symbolic representations of dates contained in the at least one date field of the database.

Sorting is effected as described in [0006]. Typically sorting is effected by "running a program" and is thus inherent in the reference. Since the phrase "running a program ... to sort ... separately from the date data symbolic representations contained in the at least one date field of the database" is not found either in the Dickens specification or file history the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the

claim and the reference.

Reissue application, claim 62

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting;

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the The threshold value is database. selected as between n_0n_1 , the smallest 20th Century year and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \le) which means

that the "threshold value" may be a date stored in the database.

The reference does not describe that the "threshold" or "pivot year" is actually a data point in the database, i.e., "a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database". The Dickens specification also fails to describe this feature. If the feature is not ignored then the claim has no description support. If the feature is ignored then it cannot be used to distinguish the reference.

storing the converted symbolic representations separate from the at least one date field of the database; and

Fig. 2 and the table of key file 3 make it clear that the converted data is stored. The meaning to be attributed to "storing ... separate from the at least one date field of the database" is not clear since there is no such phrase, or anything like it, to be found in the Dickens specification or file history. In any event, this cannot be a basis to distinguish the reference.

running a program on the stored converted symbolic representations to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

Sorting is effected as described in [0006]. Since the phrase "running a program ... to sort ... separately from the date data symbolic representations contained in the at least one date field of the database" is not found either in the Dickens specification or file history, the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

Reissue application, claim 63

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting;

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the database. The threshold value is selected as between n_0n_1 , the smallest 20th Century year and the lower value n_2n_3 , which is the maximum value of the 21st Century [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is ≤) which means that the

"threshold value" may be a date stored in the database. The reference does not describe that the "threshold" or "pivot year" is a data point in the database, i.e., "a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database". The Dickens specification also fails to describe this feature. If the feature is not ignored then the claim has no description support. If the feature is ignored then it cannot be used to distinguish the reference. storing the converted symbolic Fig. 2 and the table of key file 3 representations separate from the at make it clear that the converted data least one date field of the database: is stored. The meaning to be attributed to "storing ... separate from and the at least one date field of the database" is not clear since there is no such phrase, or anything like it, to be found in the Dickens specification or file history. In any event, this cannot be a basis to distinguish the reference. running a program collectively on the Sorting is effected as described in [0006]. Since the phrase "running a stored converted symbolic representations to sort or otherwise program ... to sort ... separately from the date data symbolic representations manipulate the dates represented by the converted symbolic contained in the at least one date field of the database" is not found representations, separately from the symbolic representations of dates either in the Dickens specification or contained in the at least one date file history, the meaning to be field of the database. attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

Reissue application, claim 64

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A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field at the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of;

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the The threshold value is database. selected as between n_0n_1 , the smallest 20th Century year and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \leq) which means

that the "threshold value" may be a date stored in the database. The meaning to be attributed to the phrase "converting ... without modifying ..." is not apparent since there is no such phrase (or anything like it) to be found in either the Dickens specification or the file history. Clearly, however, this phrase does not distinguish from the reference.

The reference does not describe that the "threshold" or "pivot year" is a data point in the database, i.e., "a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database". The Dickens specification also fails to describe this feature. If the feature is not ignored then the claim has no description support. If the feature is ignored then it cannot be used to distinguish the reference.

storing the converted symbolic representations separate from the at least one date field in the database; and

Fig. 2 and the table of key file 3 make it clear that the converted data is stored. The meaning to be attributed to "storing ... separate from the at least one date field of the database" is not clear since there is no such phrase, or anything like it, to be found in the Dickens specification or file history. In any event, this cannot be a basis to distinguish the reference.

running a program on the stored converted symbolic representations to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations separately from the symbolic representations of dates contained in the at least one date field of the database.

Sorting is effected as described in [0006]. Since the phrase "running a program ... to sort ... separately from the symbolic representations of dates contained in the at least one date field of the database" is not found either in the Dickens specification or file history, the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

Reissue Application, claim 65

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year representations of the symbolic representations of the dates as stored in the at least one date field of the database,

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

Assuming the term "windowing" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "windowing" and "pivot year" are not found in the Dickens specification. The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. Assuming that the claimed "pivot year" has the common meaning in the art, then the "threshold year" of the reference corresponds to the pivot year. The processing selects a "threshold value" or α which is "no later" than the earliest year in the The threshold value is database. selected as between n_0n_1 , the smallest 20th Century year and the lower value, n₂n₃, which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. Since the nn may be equal to the "threshold value" (if nn is not $> \alpha$, then it is \leq) which means

that the "threshold value" may be a date stored in the database. The reference does not describe that the "threshold" or "pivot year" is a data point in the database, i.e., "a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database". The Dickens specification also fails to describe this feature. If the feature is not ignored then the claim has no description support. If the feature is ignored then it cannot be used to distinguish the reference. It is not apparent how "converting" without modifying any of the symbolic can be effected without "modifying". representations of dates in the at There is no mention of converting least one date field of the database without modifying in either the for purposes of such windowing and Dickens specification or file history. converting; Consequently this cannot be used to distinguish the claim from the reference. Fig. 2 and the table of key file 3 storing the converted symbolic make it clear that the converted data representations separate from the at is stored. The meaning to be least one date field in the database; attributed to "storing ... separate from and the at least one date field of the database" is not clear since there is no such phrase, or anything like it, to be found in the Dickens specification or file history. In any event, this cannot be a basis to distinguish the reference. Sorting is effected as described in running a program collectively on the stored, converted symbolic [0006] representations to sort or otherwise manipulate the dates represented by the converted symbolic representations, Since the phrase "running a program ... separately from the symbolic to sort ... separately from the symbolic representations of dates contained in representations of dates contained in the at least one date field of the the at least one date field of the database. database" is not found either in the Dickens specification or file history, the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

Reissue application, claim 66 Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation] A method of processing dates in a The reference is directed at managing database, comprising the steps of: date keys of a data file, [Title The unprocessed database uses two providing a database with dates stored in at least one date field therein digits to represent year data, two according to a format wherein M_1M_2 is digits for month data and two digits the numerical month designator, D_1D_2 is for day data, see the data in date file 1, an example is the first entry, the numerical day designator, and Y_1Y_2 "991203" which represents 3rd Dec. is the numerical year designator, 1999 [0003]. selecting a window with a YAYB value Assuming that the meaning to be for a pivot date of the window YAYR attributed to "pivot date" is the being no later than the earliest Y_1Y_2 common meaning, then the "threshold year designator in the database; value" is the pivot date, which is the same as Y_AY_B . The assumption is necessary since neither the Dickens specification nor file history mentions "pivot date". The "threshold value" or α corresponds to $Y_{A}Y_{B}$ and it is "no later" than the earliest Y_1Y_2 since it is selected as between non1, the minimum value of the 20th Century date range and the lower value, n₂n₃, which is the maximum value of the 21st Century date range [0011] determining a century designator C₁C₂ A comparison is made between the date for each date in the database, C_1C_2 data, nn, and the threshold value, α ; having a first value if Y_1Y_2 is less if nn > α , the century designator "19" than Y_AY_B and having a second value if is used, otherwise, that is if $nn \leq \alpha$, Y_1Y_2 is equal to or greater than Y_AY_B , the other century designator, "20" is used [0015]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]. reformatting the symbolic The date data, augmented with the representation of each symbolic century designator (19 or 20), is then representation of a date in a portion written to key file 3; as seen there of the at least one date field in the the date data has been reformatted to add the century designator. That is, database, without the addition of any new data field to the database, with we start with $Y_1Y_2M_1M_2D_1D_2$ and append the reformatted symbolic C_1C_2 , to end up with $C_1C_2Y_1Y_2M_1M_2D_1D_2$. representation of each date in the database having the values C_1C_2 , Y_1Y_2 , M_1M_2 , and D_1D_2 ; and repeating the step of reformatting Since the processing is applied to until each symbolic representation of "the successive records of data file 1 a date in the at least one date field and terminates when the last record is has been reformatted in order to processed", i.e., the processing is facilitate collectively further applied to "each" record. [0015] processing the reformatted symbolic

representations of each of the symbolic representations of each of the dates.

Reissue Application, claim 67	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
A method of processing dates in a database, comprising the steps of:	The reference is directed at managing date keys of a data file, [Title]
providing a database with dates stored in at least one date field therein according to a format wherein Y_1Y_2 is the numerical year designator;	The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003].
selecting a window with a Y_AY_B value for a pivot date of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;	The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century and the lower value n_2n_3 , which is the maximum value of the 21^{st} Century date range [0011].
determining a century designator C_1C_2 for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ;	A comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015].]. Note that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015].
reformatting the symbolic representation of each symbolic representation of a date in a portion off the at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values C ₁ C ₂ , Y ₁ Y ₂ ; and	The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. The reference has added two digits, 19 or 20, to represent the century, just as described in the Dickens specification. While the reformatting has added two digits to the year field (expanding it from YY to CCYY) this is accomplished without adding a new field - it is accomplished in the reference in exactly the same fashion as it is accomplished in Dickens.
repeating the step of reformatting until each symbolic representation of a date in the at least one date field has been reformatted in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.	Since the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] Once the reformatting has been accomplished, the reformatted dates can be sorted, in other words the reformatting has facilitated further processing, processing which can be carried out collectively since all the

data has been reformatted.

Reissue Application, claim 68 Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation] A method of processing symbolic The reference is directed at managing representations of dates stored in a date keys of a data file, [Title] database, comprising the steps of: providing a database with symbolic The unprocessed database uses two representations of dates stored in at digits to represent year data, see the least one date field therein according data in date file 1, an example is the first entry, "991203" which represents to a format wherein Y_1Y_2 is the 3^{rd} Dec. 1999 [0003]. numerical year designator; selecting a window with a Y_AY_B value Assuming the term "window" is given for the first decade of the window, the common definition, then the Y_AY_B being no later than the earliest "threshold value" of the reference Y_1Y_2 year designator in the at least corresponds to the beginning of the one date field of the database; "window". The assumption is necessary since the term "window" is not found in the Dickens specification. "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20th Century date range and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. The value of α defines a window of 10 decades duration. A comparison is made between the date determining a century designator for each symbolic representation of a date data, nn, and the threshold value, α ; in the database, C_1C_2 having a first if nn > α , the century designator "19" value if Y_1Y_2 is less than Y_AY_B and is used, otherwise, that is if $nn \leq \alpha$, having a second value if Y1Y2 is equal the other century designator, "20" is to or greater than YAYB; and used [0015]. Since the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] reformatting the symbolic The date data, augmented with the representation of each symbolic century designator (19 or 20), is then representation of a date in at least written to key file 3; as seen there one date field in the database, the date data has been reformatted to without the addition of any new data add the century designator. That is, field to the database, with the we start with $Y_1Y_2M_1M_2D_1D_2$ and append C_1C_2 , to end up with $C_1C_2Y_1Y_2M_1M_2D_1D_2$. reformatted symbolic representation of each date in the database having the The reference has added two digits to represent the century, just as has values C_1C_2 , Y_1Y_2 , in order to facilitate further processing of the Dickens. To the extent this is reformatted symbolic representations "without the addition ..." in the of each of the symbolic Dickens patent, so too it is in the representations of each of the dates, reference. The reference accomplishes by running a program on the its ends through use of a programmed reformatted symbolic representations machine, hence operation "by running a of each of the dates. program" is inherent.

	
Reissue Application, claim 69	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
A method of processing dates in a database, comprising the steps of:	The reference is directed at managing date keys of a data file, [Title].
providing a database with dates stored in at least one date field therein according to a format wherein Y_1Y_2 is the numerical year designator;	The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003].
selecting a window with a $Y_{A}Y_{B}$ value for a pivot year of the window, $Y_{A}Y_{B}$ being no later than the earliest $Y_{1}Y_{2}$ year designator in the database:	Assuming the term "window" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "window" and "pivot year" are not found in the Dickens specification. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century date range and the lower value, n_2n_3 , which is the maximum value of the 21^{st} Century date range [0011]. The value of α defines a window of 10 decades duration.
determining a century designator C_1C_2 for each date in the at least one date field of the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ;	A comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015]. Since the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
reformatting the symbolic representation of each symbolic representation of a date in the at least one date field in the database, without the addition of any new data field to the database with the reformatted symbolic representation of each date in the database having the values C_1C_2 , Y_1Y_2 ;	The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. The reference has added two digits to represent the century, just as has Dickens, to the extent this is "without the addition" in the Dickens patent, so too it is in the reference.
sorting the reformatted symbolic representations of the dates in the form $C_1C_2Y_1Y_2$ and	Sorting is effected as described in $[0006]$. Both the reference and the Dickens specification describe sorting on $C_1C_2Y_1Y_2M_1M_2D_1D_2$. There is no

	description in the Dickens
	specification of sorting on $C_1C_2Y_1Y_2$ as
	claimed here. Thus to this extent
	this claim lacks written description
	support. Dickens has argued that
	disclosure of sorting on
	$C_1C_2Y_1Y_2M_1M_2D_1D_2$ supports claiming
	sorting on $C_1C_2Y_1Y_2$, see p. 58 of the
	response. If that is the case then
	the reference's teaching of sorting on
	C ₁ C ₂ Y ₁ Y ₂ M ₁ M ₂ D ₁ D ₂ is an anticipation of
	the claim.
running a program on the reformatted	The "program" is the purpose for
symbolic representations of each of	maintaining the file or database,
the dates.	i.e., it is inherent. In other words
	the database is maintained in order to
	accomplish some real work. The
	database is maintained on a
	programmable machine and so the real
	work is accomplished by running a
	program.

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Reissue application, claim 70

Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]

A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation. The problem solved by the invention is the inversion in time sequence caused by the use of two digit year indications at the year 2000. [0005]

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity,

The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The symbolic representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015]

by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year, with the pivot year being less than or equal to the earliest date represented by the symbolic representation of dates stored in the at least one date field, without the addition of any new data field to the database, and

Assuming the term "window" and "pivot year" are given the common definition, then the "threshold value" of the reference corresponds to the beginning of the "window" as well as the "pivot year". The assumption is necessary since the terms "window" and "pivot year" are not found in the Dickens specification. A threshold value is selected lying between n_0n_1 , the smallest 20th Century year and the lower value, n₂n₃, which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. "threshold value" or pivot year is equal to or less than the earliest nn. The reference has added two digits, 19 or 20, to represent the century, just as is described in the Dickens specification. To the extent this is "without the addition ..." in the Dickens patent, so too it is in the reference.

without modifying any of the symbolic representations of dates in the at least one date field, for purposes of such windowing and converting and

running a program on the converted symbolic representations of each of the dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database.

The meaning to be attributed to the phrase "converting ... without modifying ..." is not apparent since there is no such phrase (or anything like it) to be found in either the Dickens specification or the file history. Clearly, however, this phrase does not distinguish from the reference.

Sorting is effected as described in [0006]. Typically sorting is effected by a program and so "running a program ... to sort" is inherent in the reference. Since the phrase "running a program ... to sort ... separately from the date data symbolic representations contained in the at least one date field of the database" is not found either in the Dickens specification or file history, the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

Reissue application, claim 71 Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation] A method for representing and The reference is directed at managing utilizing dates stored in at least one date keys of a data file, [Title] which date field of the database utilizing is effected by processing date symbolic representations of the dates representations in a database. Each stored in the at least one date field item of data is a symbolic of the database, which are in a format representation. The problem solved by that creates ambiguity between dates the invention is the inversion in time in each of a pair of adjacent sequence caused by the use of two centuries, comprising the steps of digit year indications at the year 2000. [0005] converting each of the symbolic The unprocessed database uses two representations of dates stored in the digits to represent year data, see the data in date file 1, an example is the at least one date field of the database to a symbolic representation first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The symbolic of each of the respective dates that does not create the ambiguity, representations are amended by adding either "19" or "20" to represent the 20th and 21st century, respectively [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record [0015] by windowing the symbolic Assuming the term "windowing" and representations of each of the "pivot year" are given the common respective dates as stored in the at definition, then the "threshold value" least one date field of the database of the reference corresponds to the beginning of the "window" as well as against a pivot year, with the pivot year being less than or equal to the the "pivot year". The assumption is earliest date represented by a necessary since the terms "windowing" symbolic representation of dates and "pivot year" are not found in the stored in the at least one date field, Dickens specification. The processing and selects a "threshold value" or α which is "no later" than the earliest year in the database. A threshold value is selected lying between non1, the smallest 20th Century year and the lower value, n_2n_3 , which is the maximum value of the 21st Century date range [0011]. Then a comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the "19" designator is selected, otherwise "20" is selected. This is the process, known to others as

"windowing", although not mentioned in

the "threshold value" is, according to

although that term is not found in the

the specification. In this process,

prior art usage, the pivot year.

	Dickens specification.
without the addition of any new data field to the database for purposes of such windowing and converting;	The reference has added two digits, 19 or 20, to represent the century, just as is described in the Dickens specification. Thus while the year field has been expanded (from YY to CCYY) no new field has been added. Since the reference and the patent's disclosure accomplish the reformatting in essentially the same manner, this clause cannot distinguish from the reference.
storing each of the converted symbolic representations of each of the dates separate from the database; and,	The key file 3 represents the stored dates. The meaning to be attributed to "storing separate from the database" is not clear since there is no such phrase, or anything like it, to be found in the Dickens specification or file history. In any event, this cannot be a basis to distinguish the reference.
running a program on the stored converted symbolic representations of each of the converted symbolic representations of the dates to sort or otherwise manipulate the dates represented by the converted symbolic representations,	Sorting is effected as described in [0006]. Typically sorting is effected by running a program and so this is inherent in the reference.
separately from the date data symbolic representations contained in the at least one date field of the database.	Since the phrase "running a program to sort separately from the date data symbolic representations contained in the at least one date field of the database" is not found either in the Dickens specification or file history, the meaning to be attributed to this clause is in doubt. It is clear, however that there is no distinction between this clause of the claim and the reference.

A method of processing symbolic representations of dates stored in a database, comprising the steps of selecting a database with symbolic representations of dates stored therein according to a format wherein M ₁ M ₂ is the numerical month designator, D ₁ D ₂ is the numerical day designator, and Y ₁ Y ₂ is the numerical designator; selecting a 10-decade window with a Y _A Y _B value for the first decade of the window being no later than the database; A method of processing symbolic representations of dates stored in a database, comprising the steps of The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation of data is a symbolic representation of data is a symbolic representation of data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003]. The shows the use of two digits for year, month and date. The "threshold value" or α corresponds to Y _A Y _B and it is "no later" than the earliest Y ₁ Y ₂ year designator in the database; The "threshold value" or α corresponds to Y _A Y _B and it is "no later" than the earliest Y ₁ Y ₂ since it is selected as between n ₀ n ₁ , the minimum value of the 20 th Century and the lower value, n ₂ n ₃ , which is the maximum value of the 20 th Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or '1900'." and there is a "minimum value"
numbers in the text of both the Japanese publication and in the translation] A method of processing symbolic representations of dates stored in a database, comprising the steps of date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representations of dates stored therein according to a format wherein M1M2 is the numerical month designator, D1D2 is the numerical day designator, and Y1Y2 is the numerical day designator; selecting a 10-decade window with a YAYB value for the first decade of the window being no later than the earliest Y1Y2 year designator in the database; The "mathod in the translation] The reference is directed at managing date keys of a data file, [Title] which is the maximosing date representations in a database. Each item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3rd Dec. 1999 [0003]. The shows the use of two digits for year, month and date. The "threshold value" or a corresponds to YAYB and it is "no later" than the earliest Y1Y2 since it is selected as between non1, the minimum value of the 20th Century and the lower value, n2n3, which is the maximum value of the 21st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
A method of processing symbolic representations of dates stored in a database, comprising the steps of selecting a database with symbolic representations of dates stored item of data is a symbolic representations of dates stored therein according to a format wherein M ₁ M ₂ is the numerical month designator, D ₁ D ₂ is the numerical day designator, and Y ₁ Y ₂ is the numerical day designator; selecting a 10-decade window with a Y _A Y _B value for the first decade of the window being no later than the earliest Y ₁ Y ₂ year designator in the database; The "threshold value" or α corresponds to Y _A Y _B and it is "no later" than the earliest Y ₁ Y ₂ since it is selected as between n ₀ n ₁ , the minimum value of the 20 th Century and the lower value, n ₂ n ₃ , which is the maximum value of the 21 st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
A method of processing symbolic representations of dates stored in a database, comprising the steps of selecting a database with symbolic representations of dates stored therein according to a format wherein M ₁ M ₂ is the numerical month designator, D ₁ D ₂ is the numerical day designator, and Y ₁ Y ₂ is the numerical day designator are selecting a 10-decade window with a Y _A Y _B value for the first decade of the window being no later than the earliest Y ₁ Y ₂ year designator in the database; The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the data in date file 1, an example is the use of two digits for year, month and date. The "threshold value" or \(\alpha \) corresponds to Y _A Y _B and it is "no later" than the earliest Y ₁ Y ₂ year designator in the database; The reference is directed at managing date keys of a data file, [Title] which is tender as data file, [Title] which is tendered is directed at managing date keys of a data file. [Title] which is tendered to representations in a database. Each item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the use of two digits for year, month and date. The "threshold value" or \(\alpha \) corresponds to Y _A Y _B and it is "no later" than the earliest Y ₁ Y ₂ year designator in the data in date file 1 and example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the use of two digits to represent year data, year data, year data, year data in date fi
A method of processing symbolic representations of dates stored in a database, comprising the steps of date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical day designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 (0003]. The shows the use of two digits for year, month and date. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; Which is the maximum value of the 20^{th} Century and the lower value, n_2n_3 , which is the maximum value of the 20^{th} Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reson for this is that the data file 1 does not contain the year data '2099' or
representations of dates stored in a database, comprising the steps of database. Each item of data is a symbolic representation data is a symbolic representation database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The shows the use of two digits for year, month and date. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to α between $\alpha_0 \alpha_1$, the minimum value of the 20th Century and the lower value, $\alpha_1 \alpha_2$, which is the maximum value of the 21st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
representations of dates stored in a database, comprising the steps of database. Each item of data is a symbolic representation data is a symbolic representation database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The shows the use of two digits for year, month and date. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to α between $\alpha_0 \alpha_1$, the minimum value of the 20th Century and the lower value, $\alpha_1 \alpha_2$, which is the maximum value of the 21st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
database, comprising the steps of selecting a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical day designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; Is effected by processing date representations in a database. Each item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The shows the use of two digits for year, month and date. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century and the lower value, n_2n_3 , which is the maximum value of the 20^{th} Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
representations in a database. Each item of data is a symbolic representation selecting a database with symbolic representation of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical day designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database;
item of data is a symbolic representation selecting a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; Item of data is a symbolic representation The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents Y_1Y_2 is the numerical day date. The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the data in date file 1 at a example is the data in date file 1 data in date file 1 at a example is the data in date file 1 at a example is the data in date file 1 at a example is the data in date file 1 at a example is the data in date file 1 at a example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is the data in date file 1, an example is data in data file 1 at a in data file 1 at a file 1 at a file 1 data file 1 data file 1 data file 1 data file 1
selecting a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; $ \begin{array}{c} \text{The unprocessed database uses two} \\ \text{digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3^{rd} Dec. 1999 [0003]. The shows the use of two digits for year, month and date. \begin{array}{c} \text{The "threshold value" or α corresponds} \\ \text{to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1, the minimum value of the 20^{th} Century and the lower value, n_2n_3, which is the maximum value of the 21^{st} Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or$
selecting a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database;
representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; $ \begin{array}{c} \text{The "threshold value" or α corresponds} \\ \text{The "threshold value" or α corresponds} \\ \text{To the minimum value of the 20^{th} Century and the lower value, n_2n_3,} \\ \text{which is the maximum value of the 21^{st}} \\ \text{Century date range [0011]. The text} \\ \text{[0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or } \\ \end{array} $
therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database;
M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; as electing a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database;
designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; Detween n_0n_1 , the minimum value of the 20 th Century and the lower value, n_2n_3 , which is the maximum value of the 21 st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; between n_0n_1 , the minimum value of the 20 th Century and the lower value, n_2n_3 , which is the maximum value of the 21 st [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
designator, and Y_1Y_2 is the numerical year designator; selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; between n_0n_1 , the minimum value of the 20 th Century and the lower value, n_2n_3 , which is the maximum value of the 21 st [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
year designator; date. Selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20 th Century and the lower value, n_2n_3 , which is the maximum value of the 21 st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
selecting a 10-decade window with a Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database;
Y_AY_B value for the first decade of the window being no later than the earliest Y_1Y_2 year designator in the database; to Y_AY_B and it is "no later" than the earliest Y_1Y_2 year designator in the database; between n_0n_1 , the minimum value of the 20^{th} Century and the lower value, n_2n_3 , which is the maximum value of the 21^{st} Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
window being no later than the earliest Y_1Y_2 year designator in the database;
earliest Y_1Y_2 year designator in the database; between n_0n_1 , the minimum value of the $20^{\rm th}$ Century and the lower value, n_2n_3 , which is the maximum value of the $21^{\rm st}$ Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
database; $ 20^{\text{th}} \text{ Century and the lower value, } n_2n_3, \\ \text{which is the maximum value of the } 21^{\text{st}} \\ \text{Century date range [0011]. The text} \\ [0010 \text{ and } 0011] \text{ make it clear that the } \\ \text{date range is limited "The reason for } \\ \text{this is that the data file 1 does not } \\ \text{contain the year data '2099' or } $
which is the maximum value of the 21 st Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
Century date range [0011]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
[0010 and 0011] make it clear that the data "The reason for this is that the data file 1 does not contain the year data '2099' or
date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or
this is that the data file 1 does not contain the year data '2099' or
contain the year data '2099' or
contain the year data '2099' or
1 1500 : and energy a minimum varue
of the year data in the 20 th century"
ļ ————————————————————————————————————
and a "maximum value of the year data
in the 21 st century" with the
"threshold value" in between these
two. This is only possible if the
span of the data base is 10 decades.
determining a century designator C_1C_2 A comparison is made between the date
for each symbolic representation of a data, nn, and the threshold value, α ;
date in the database, C_1C_2 having a if nn > α , the century designator "19"
first value if Y.Y. is less than Y.Y.
and having a second value if Y_1Y_2 is
equal to or greater than Y.Y. and the other century designator, "20" is
used [0015]. Note also that the
processing is applied to "the
successive records of data file 1 and
terminates when the last record is
processed", i.e., the processing is
applied to "each" record. [0015]
reformatting the symbolic The date data, augmented with the
representation of each symbolic century designator (19 or 20), is then
representation of a date in the written to key file 3; as seen there
database with the values C_1C_2 , Y_1Y_2 , the date data has been reformatted to
COLORDON WILL LINE VALUES CALA LATA LIND COLD DID TOLD TOUR SONDS SOFTENS SAN SAN
M_1M_2 , D_1D_2 prior to collectively add the century designator.
M_1M_2 , D_1D_2 prior to collectively add the century designator. Thereafter the database is used for
M_1M_2 , D_1D_2 prior to collectively add the century designator. Thereafter the database is used for contained within the database its intended purpose. The reformatting
M_1M_2 , D_1D_2 prior to collectively add the century designator. Thereafter the database is used for

collectively. While further processing is inherent in the reference - that is the purpose for which the database 1 is maintained, this claim does not actually require such further processing. Rather the claim merely requires that the reformatting facilitate such further processing.

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Reissue application, claim 73	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the translation]
A method of processing symbolic representations of dates stored in a database comprising the steps of	The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation
providing a database with symbolic representations of dates stored therein according to a format wherein Y ₁ Y ₂ is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;	The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003]. The text [0010 and 0011] make it clear that the date range is limited "The reason for this is that the data file 1 does not contain the year data '2099' or '1900'" and there is a "minimum value of the year data in the 20 th century" and a "maximum value of the year data in the 21 st century" with the "threshold value" in between these two. This is only possible if the span of the data base is less than 10 decades.
selecting a 10-decade window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;	The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century and the lower value, n_2n_3 , which is the maximum value of the 21^{st} Century date range [0011].
determining a century designator C_1C_2 for each symbolic representation of a date in the database C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B and,	A comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
reformatting the symbolic representation of the date with the values C_1C_2 , Y_1Y_2 , to facilitate further processing of the dates.	The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Since the reformatted data can now be sorted the reformatting is accomplished to facilitate the further processing.

Reissue application, claim 74	Tapan 06-103133 April 15 1004
Reissue application, Claim /4	Japan 06-103133, April 15, 1994 [Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
A mothod of processing dates in a	
A method of processing dates in a	The reference is directed at managing
database, comprising the steps of	date keys of a data file, [Title] which
	is effected by processing date
	representations in a database.
providing a database with symbolic	The unprocessed database uses two
representations of dates stored	digits to represent year data, see the
therein according to a format wherein	data in date file 1, an example is the
Y_1Y_2 is the numerical year designator,	first entry, "991203" which represents
all of symbolic representations of	3 rd Dec. 1999 [0003]. The text [0010
dates falling within a 10-decade	and 0011] make it clear that the date
period of time;	range is limited "The reason for this
	is that the data file 1 does not
	contain the year data '2099' or
	'1900'" and there is a "minimum value
	of the year data in the 20th century"
	and a "maximum value of the year data
	in the 21 st century" with the
	"threshold value" in between these
	two. This is only possible if the
	span of the data base is less than 10
	decades.
selecting a 10-decade window with a	The "threshold value" or α corresponds
Y_AY_B value for the first decade of the	to Y_AY_B and it is "no later" than the
window Y_AY_B being no later than the	earliest Y1Y2 since it is selected as
earliest Y_1Y_2 year designator in the database;	between n_0n_1 , the minimum value of the
	20th Century years and the lower
	value, n_2n_3 , which is the maximum
	value of the 21 st Century years
	[0011].
determining a century designator C1C2,	A comparison is made between the date
for each date in the database, C_1C_2	data, nn, and the threshold value, α ;
having a first value if Y_1Y_2 is less	if nn > α , the century designator "19"
than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ;	
	is used otherwise that is if no < a
•	
•	the other century designator, "20" is
•	the other century designator, "20" is used [0015]. Note also that the
•	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the
•	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and
•	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is
•	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is
Y_1Y_2 is equal to or greater than Y_AY_B ;	used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly speaking the reference describes the
•	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly speaking the reference describes the data format $C_1C_2Y_1Y_2M_1M_2D_1D_2$ not $C_1C_2Y_1Y_2$.
Y_1Y_2 is equal to or greater than $Y_AY_B;$ reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly speaking the reference describes the data format $C_1C_2Y_1Y_2M_1M_2D_1D_2$ not $C_1C_2Y_1Y_2$. However, the Dickens specification has
Y_1Y_2 is equal to or greater than $Y_AY_B;$ reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly speaking the reference describes the data format $C_1C_2Y_1Y_2M_1M_2D_1D_2$ not $C_1C_2Y_1Y_2$. However, the Dickens specification has the same disclosure so there can be no
Y_1Y_2 is equal to or greater than Y_AY_B ; reformatting each date in the form $C_1C_2Y_1Y_2$ to facilitate further	the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015] The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Strictly speaking the reference describes the data format $C_1C_2Y_1Y_2M_1M_2D_1D_2$ not $C_1C_2Y_1Y_2$. However, the Dickens specification has

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sorting the dates in the form $C_1C_2Y_1Y_2$.	Sorting is effected [0012] on the reformatted data. Both the reference and the Dickens specification describe sorting on the C ₁ C ₂ Y ₁ Y ₂ M ₁ M ₂ D ₁ D ₂ date
	data, thus this recitation cannot
	distinguish from the reference.

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Reissue Application, claim 75	Japan 06-103133, April 15, 1994 [Citations are to the paragraph numbers in the text of both the Japanese publication and in the
	translation]
A method of processing symbolic representations of dates stored in a database, comprising the steps of	The reference is directed at managing date keys of a data file, [Title] which is effected by processing date representations in a database. Each item of data is a symbolic representation
providing a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator;	The unprocessed database uses two digits to represent year data, see the data in date file 1, an example is the first entry, "991203" which represents 3 rd Dec. 1999 [0003], showing the use of two digits for year, month and day.
selecting a window with a Y_AY_B value for a pivot date of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database:	The "threshold value" or α corresponds to Y_AY_B and it is "no later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the minimum value of the 20^{th} Century years and the lower value n_2n_3 , which is the maximum value of the 21^{st} Century years [0011]. The "threshold value" of the reference corresponds to the prior art term "pivot date", although that term is not found in the Dickens specification or file history.
determining a century designator C_1C_2 for each symbolic representation of a date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is greater than Y_AY_B ; and	A comparison is made between the date data, nn, and the threshold value, α ; if nn > α , the century designator "19" is used, otherwise, that is if nn $\leq \alpha$, the other century designator, "20" is used [0015]. Note also that the processing is applied to "the successive records of data file 1 and terminates when the last record is processed", i.e., the processing is applied to "each" record. [0015]
reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values C_1C_2 , Y_1Y_2 , M_1M_2 , D_1D_2 in order to facilitate further processing of the reformatted symbolic representations, of each of the symbolic representations of each of the dates.	The date data, augmented with the century designator (19 or 20), is then written to key file 3; as seen there the date data has been reformatted to add the century designator. Inasmuch as the unprocessed database had used Y ₁ Y ₂ , M ₁ M ₂ , D ₁ D ₂ , the addition of "19" or "20" meets the requirement of having the values C ₁ C ₂ , Y ₁ Y ₂ , M ₁ M ₂ , D ₁ D ₂ to facilitate further processing. The reference has added two digits to represent the century, just as in the Dickens specification. This allows sorting of the dates, thus facilitating further processing.

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While the year field has been expanded
from YY to CCYY, no new fields are
required. Since the reference and the
patent specification both augment the
year field in substantially the same
manner it is apparent this clause
cannot distinguish the claim.

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Reissue Application, claim 76	Japan 06-103133, April 15, 1994
	[Citations are to the paragraph
	numbers in the text of both the
	Japanese publication and in the
	translation]
A method of processing dates in a	The reference is directed at
database, comprising the steps of	managing date keys of a data
	file, [Title] which is effected by
	processing date representations in
	database.
providing a database with dates	The unprocessed database uses two
stored therein according to a format	digits to represent year data, two
wherein M_1M_2 is the numerical month	digits for month data and two digits
designator, D_1D_2 is the numerical	for day, see the data in date file
day designator, and Y_1Y_2 is the	1, an example is the first entry,
numerical year designator;	"991203" which represents 3 rd Dec.
, and a second of the second o	1999 [0003]
selecting a window with a YAYB value	The "threshold value" or α
for a pivot date of the window, Y_AY_B	corresponds to YAYB and it is "no
being no later than the earliest	
Y_1Y_2 year designator in the	later" than the earliest Y_1Y_2 since it is selected as between n_0n_1 , the
database;	minimum value of the 20^{th} Century
· · · · · · · · · · ·	<u>-</u>
	and the lower value, n_2n_3 , which is the maximum value of the 21^{st}
	Century date range [0011]. The
	"threshold value" of the reference
	corresponds to the prior art term
	"pivot date", although that term is
	not found in the Dickens
	specification or file history.
determining a century designator	A comparison is made between the
C_1C_2 for each date in the database,	year date data, nn, and the
C_1C_2 having a first value if Y_1Y_2 is	threshold value, α ; if nn > α , the
less than Y_AY_B and having a second	century designator "19" is used,
value if Y_1Y_2 is equal to or greater than Y_AY_B ;	otherwise, that is if $nn \leq \alpha$, the
	other century designator, "20" is
	used [0015]. Note also that the
	processing is applied to "the
	successive records of data file 1
	and terminates when the last record
	is processed", i.e., the processing
	is applied to "each" record. [0015]
reformatting the symbolic	The date data, augmented with the
representation of each symbolic	century designator (19 or 20), is
representation of a date in the	then written to key file 3; as seen
database, without the addition of	there the date data has been
any new data field to the database,	reformatted to add the century
with the reformatted symbolic	designator. Inasmuch as the
representation of each date in the	unprocessed database had used Y1Y2,
database having the values C_1C_2 ,	M_1M_2 , D_1D_2 , the addition of "19" or
Y_1Y_2 , M_1M_2 , and D_1D_2 , in order to	"20" meets the requirement of having
facilitate further processing of the	the values C_1C_2 , Y_1Y_2 , M_1M_2 , D_1D_2 to
reformatted symbolic representations	facilitate further processing in
of each of the symbolic	that sorting the reformatted dates
	is now possible. While the year
representations of each of the dates; and	field has been expanded from YY to
	CCYY, no new fields are required.
uates; and	our, no new rierds are reduited.
uates; and	Since both the reference and the
uates; and	Since both the reference and the
uates; and	patent specification perform the
uales; and	patent specification perform the reformatting in substantially the
uales; and	patent specification perform the reformatting in substantially the same manner, this clause cannot
uales; and	patent specification perform the reformatting in substantially the same manner, this clause cannot distinguish the claim from the
sorting the dates in the form	patent specification perform the reformatting in substantially the same manner, this clause cannot

 $C_1C_2Y_1Y_2M_1M_2D_1D_2$.

full, 8 digit dates as specified.